Title (en)

NEURAL NETWORKS

Publication

EP 0399753 A3 19910918 (EN)

Application

EP 90305475 A 19900521

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Abstract (en)

[origin: EP0399753A2] A neural plane, which can form the basis of a neural network or a component thereof, is comprised by an optical modulator, an electrical non-linearity circuit and an optical detector interconnected whereby in use the non-linearity circuit controls the modulator in dependence on the detector output. There are parallel arrays (10, 11, 12) of such modulators, non-linearity circuits and detectors (M, T, D, 30, 33, 34). The modulator, non-linearity circuits and detectors have components formed in a common semiconductor substrate (20), for example by VLSI techniques with a silicon substrate, the modulators (30) may be comprised by liquid crystal on silicon in that case.

IPC 1-7

G06F 15/80

IPC 8 full level

G06G 7/60 (2006.01); **G06F 15/18** (2006.01); **G06N 3/04** (2006.01); **G06N 3/067** (2006.01); **G06N 99/00** (2010.01); **H04B 10/07** (2013.01); **H04B 10/11** (2013.01); **H04B 10/112** (2013.01); **H04B 10/118** (2013.01); **H04B 10/27** (2013.01); **H04B 10/80** (2013.01)

CPC (source: EP US)

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Citation (search report)

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